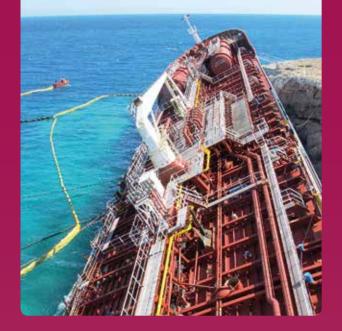




ITOPF Ltd

TECHNICAL SERVICES



Introduction to ITOPF

TOPF is a not-for-profit organisation established on behalf of the world's shipowners and their insurers to promote effective response to marine spills of oil, chemicals and other hazardous substances. Technical services include emergency response, advice on clean-up techniques, damage assessment, claims analysis, assistance with spill response planning and the provision of training and information.

Since 1968, ITOPF technical staff have responded on-site to approximately 800 shipping incidents in 100 countries, to provide scientific and objective advice on clean-up measures, the effects of pollutants on the environment and economic activities, and on compensation. ITOPF has also provided advice remotely for numerous other incidents. These incidents can involve oil, chemical and dry bulk and packaged cargoes, as well as bunker fuel from all types of ship. Advice is also given occasionally in relation to oil spills

from other potential sources of marine pollution, including pipelines and offshore installations, and physical damage to coral reefs resulting from ship groundings.

The first-hand experience gained by ITOPF's staff through direct involvement in pollution incidents is utilised during damage assessment, contingency planning and training assignments, as well as in the production of technical publications and films.

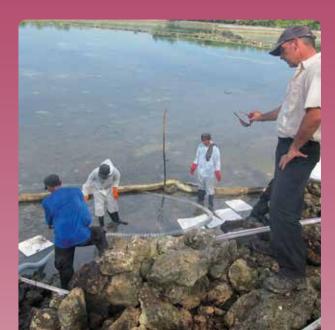
ITOPF's income is primarily through subscriptions from shipowners, paid on their behalf by Protection and Indemnity (P&I) insurers who enrol them in ITOPF as either Members or Associates. Enrolment allows access to a full range of technical and information services, usually at no cost.

ITOPF's membership comprises over 7,800 tanker owners and bareboat charterers, who between them own or operate almost 13,300 tankers, barges and combination carriers with a total gross tonnage of about 420 million GT. This represents virtually all the world's ocean-going bulk oil, chemical and gas carrier tonnage and so it is extremely rare for the owner of any tanker engaged in international trade not to be a Member of ITOPF.

Associates comprise the owners and bareboat charterers of all other types of ship, currently totalling some 792 million GT. This reflects ITOPF's important role in responding to bunker spills from non-tankers.

ITOPF's activities are overseen by an international Board of Directors representing the organisation's independent and oil company membership and their P&I insurers.







Technical ServicesResponse to Marine Spills

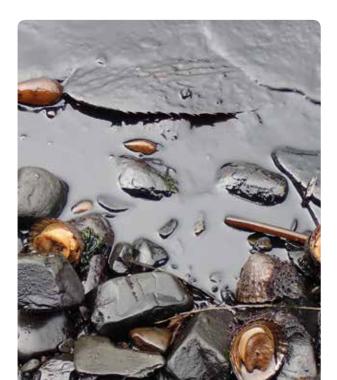
Responding to ship-source spills of oil, chemicals and other hazardous substances is ITOPF's priority service and is normally performed, without charge, at the request of one of its Members or Associates and their P&I insurers. The International Oil Pollution Compensation Funds (IOPC Funds) also usually call on ITOPF's technical services for oil spills in which they are involved.

The role of the ITOPF technical staff member at the site of an incident varies according to the circumstances but is always advisory and is based on a consistent scientific approach. It normally includes one or more of the following activities:

- advising all parties on the potential fate and effects of the oil, chemicals and other hazardous substances;
- assisting and advising all parties on the most appropriate clean-up techniques, with the aim of mitigating any damage;
- helping to source equipment and, in cases where the shipowner is required to mount the response operation, helping to organise the clean-up;
- undertaking surveys, monitoring the clean-up and advising all parties on the technical merit of the actions;

- investigating damage to the marine environment and fisheries;
- advising on methods to mitigate environmental and economic losses, including restoration options.

In all cases, the aim is to co-operate and work closely with the government agencies and all other parties involved in an incident, and to reach agreement on measures that are technically justified in the particular circumstances. This not only helps to ensure that the clean-up is as effective as possible and that damage is minimised, but also that subsequent claims for compensation can be dealt with promptly and amicably.



Damage Assessment and Claims Analysis

Assessment of claims for compensation is a natural extension of ITOPF's attendance onsite at the time of an incident. This usually involves assessing the reasonableness of clean-up costs and the technical merit of claims for damage to economic resources. The assessment of damage to fisheries, especially mariculture facilities, is a specialist area, which often requires the detailed analysis of complex claims.

ITOPF's advice is also sought regularly on environmental damage caused by spills, and on the feasibility and technical justification of proposed restoration measures.

ITOPF's role is to encourage a cooperative approach to the assessment of pollution damage so as to facilitate the prompt and amicable settlement of claims. In this regard, ITOPF provides scientific support to both claimants and those who will actually pay the compensation.



Contingency Planning and Advisory Work

A major spill presents those in charge with a range of complex problems and prompt decisions are needed if an effective response is to be mounted. The likelihood that the response will be a success is greater if effort has been devoted beforehand to the preparation of a contingency plan that is both comprehensive and realistic.

Using their extensive practical experience of spill response around the world, ITOPF staff often advise governments, industry, international agencies and other organisations on the preparation of contingency plans and other matters relating to marine pollution.



Training and Education

The scientific knowledge and first-hand experience of ITOPF staff is shared at training courses and seminars for government and industry around the world. ITOPF frequently assists with spill drills and exercises to ensure contingency plans are implemented effectively.

The ITOPF website (www.itopf.org) provides comprehensive information on marine pollution response, compensation and statistics. A site specifically for younger children has been developed recently.

Practical guidance on oil and chemical spill response and effects in the marine environment is available through the series of ITOPF Technical Information Papers (TIPs). These are available freely in several languages from the ITOPF website.

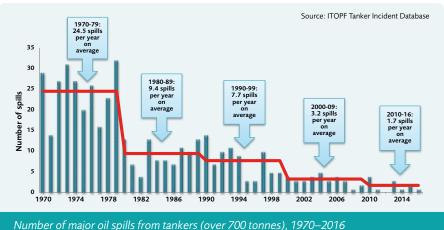
ITOPF has produced a series of films to promote effective response to oil spills from ships. The films are subtitled in multiple languages and are available to view freely from ITOPF's website or can be purchased as a DVD for use on training courses.

ITOPF promotes research and development into the challenges of spill response through the ITOPF R&D Award. Up to £50,000 is available annually to fund R&D projects that contribute to the understanding of accidental marine pollution.



Response to Marine Oil Spills Film Series

- 1 Introduction to Oil Spills
- 2 Aerial Surveillance
- 3 At-Sea Response
- 4 Shoreline Clean-up
- 5 Waste Management
- 6 Environmental Impacts
- 7 Oil Spill Compensation
- 8 Oil Spills in Cold Climates



ITOPF Technical Information Papers (TIPs)

- 1 Aerial Observation of Marine Oil Spills
- 2 Fate of Marine Oil Spills
- 3 Use of Booms in Oil Pollution Response
- 4 Use of Dispersants to Treat Oil Spills
- 5 Use of Skimmers in Oil Pollution Response
- 6 Recognition of Oil on Shorelines
- 7 Clean-up of Oil from Shorelines
- 8 Use of Sorbent Materials in Oil Spill Response
- 9 Disposal of Oil and Debris

- 10 Leadership, Command & Management of Oil Spills
- 11 Effects of Oil Pollution on Fisheries and Mariculture
- 12 Effects of Oil Pollution on Social and Economic Activities
- 13 Effects of Oil Pollution on the Environment
- 14 Sampling and Monitoring of Marine Oil Spills
- 15 Preparation and Submission of Claims from Oil Pollution
- 16 Contingency Planning for Marine Oil Spills
- 17 Response to Marine Chemical Incidents



Emergency Contact in the Event of an Incident

UK Business Hours

Please use ITOPF's office telephone number: +44 (0)20 7566 6999

Outside UK Business Hours – Emergencies Only +44 (0)20 7566 6998

Callers should be ready to leave their name, contact number and a brief message.

Please do not rely on notification of emergencies to ITOPF by email.



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